

**CLAIMS**

1. A method of handing over a mobile node from a first access router to a second access router comprising:  
  
    sending a request message from the second access router to the mobile node; and  
  
    in response to the received request message, sending a connectivity report from the mobile node to the second access router.
2. The method of claim 1, where prior to sending the request message from the second access router to the mobile node, the mobile node obtains connectivity with the second access router by moving into a geographic location associated with the second access router.
3. The method of claim 1, wherein the connectivity report includes an IP address of the first access router.
4. The method of claim 3, wherein the connectivity report further includes an L2 identifier of the first access router.
5. The method of claim 3, wherein the connectivity report further includes an L2 identifier of a Access Point attached to the first access router.

6. The method of claim 1, wherein sending the request message comprises the second access router selecting one mobile node from a plurality of mobile nodes in order to send the request message.

7. The method of claim 6, wherein the one mobile node is selected randomly from the plurality of mobile nodes.

8. The method of claim 1, further comprising performing handover of the mobile node from the first access router to the second access router after sending the connectivity report.

9. The method of claim 1, further comprising performing handover of the mobile node from the first access router to the second access router before sending the connectivity report.

10. A method comprising:  
moving a mobile node from a first geographic location associated with a first access router to a second geographic location associated with a second access router;  
sending a request message from the second access router to the mobile node; and  
sending a connectivity report from the mobile node to the second access router.

11. The method of claim 10, where prior to sending the request message from the second access router to the mobile node, the mobile node obtains connectivity with the second access router.

12. The method of claim 10, wherein the connectivity report includes an IP address of the first access router.

13. The method of claim 12, wherein the connectivity report further includes an L2 identifier of the first access router or L2 identifier of a access point connected to the first access router.

14. The method of claim 10, wherein sending the request message comprises the second access router selecting one mobile node from a plurality of mobile nodes in order to send the request message.

15. The method of claim 14, wherein the one mobile node is selected randomly from the plurality of mobile nodes.

16. The method of claim 10, further comprising performing handover of the mobile node from the first access router to the second access router after sending the connectivity report.

17. The method of claim 10, further comprising performing handover of the mobile node from the first access router to the second access router before sending the connectivity report.

18. A mobile IP network comprising:  
a first access router;  
a second access router coupled to the first access router; and  
a mobile node, wherein upon the mobile node moving to a geographic location associated with the second access router, the second access router sends a request message to the mobile node requesting a connectivity report.

19. The network of claim 18, wherein the mobile node sends the connectivity report to the second access router in response to receiving the request message sent from the second access router.

20. The network of claim 19, wherein the connectivity report includes an IP address of the first access router.

21. The network of claim 20, wherein the connectivity report further includes an L2 identifier of the first access router or L2 identifier of a access point connected to the first access router.

22. The network of claim 19, wherein the network performs handover of the mobile node from the first access router to the second access router before the mobile node sends the connectivity report.

23. The network of claim 19, wherein the network performs handover of the mobile node from the first access router to the second access router after the mobile node sends the connectivity report.

24. The network of claim 18, wherein the second access router selects one mobile node from a plurality of mobile nodes in order to request the connectivity report.

25. The network of claim 24, wherein the one mobile node is selected randomly from the plurality of mobile nodes.

26. An access router having a processor that executes computer-readable instructions for performing a method of handing over a mobile node from another access router, the method comprising:

performing handover of the mobile node from the another access router;  
sending a request message from the access router to the mobile node; and  
receiving a connectivity report from the mobile node.

27. The access router of claim 26, wherein the request message is sent after the mobile node moves from a first geographic location associated with the another access router to a second geographic location associated with the access router.

28. The access router of claim 26, wherein the performing handover occurs prior to receiving the connectivity report.

29. The access router of claim 26, wherein the performing handover occurs after receiving the connectivity report.

30. The access router of claim 26, wherein sending the request message comprises the access router selecting one mobile node from a plurality of mobile nodes in order to send the request message.

31. The access router of claim 30, wherein the one mobile node is selected randomly from the plurality of mobile nodes.